

1. Summary

The MPPT RS 450/100, batches HQ2216 up to and including HQ2236, show an excessive failure rate. The underlying cause was a temporary change in a component. Despite extensive bench testing when approving the change, field returns have shown that these batches do not meet our normal reliability standards.

The MPPT RS 450/200 is not affected.

The failure in question does not pose a safety concern. After the failure of the component, the PV output is shorted and the unit shows Error #200, DC Voltage Error.

Analysis of the field returns has not indicated a relation between probability of failure and type of installation such as PV array, battery/inverter type or size. There might be certain specific situations that trigger the failure, but in general our current expectation is that a significant percentage of units that have not failed yet may also fail prematurely. This could happen within months, but also years.

Therefore, this communication.

Extended warranty & free of charge replacement

Victron will replace any of the affected units at any point in the next 10 years. Thus, if the unit is installed and working, installers can leave them in place in the knowledge that should a unit fail in the next 10 years, it will be replaced under warranty.

The warranty of all affected units has been extended, for free, to 10 years.

That said, all affected units are eligible for a free of charge replacement, even if they still work.

See section 3 below for further details.

Other quality improvements

Besides these component changes, multiple improvements have been made to both the MPPT RS 450/100 and the 200. Batches beyond HQ2236 show a significantly lower failure rate.

Conclusion

This document is communicated both to our distributors as well as in public. In case you are an installer or end-user, please contact your dealer.

Our apologies for the inconvenience caused (!).

2. Affected models and serial numbers

Part number	Article description	Affected serial nbrs ⁽¹⁾
SCC145110410	SmartSolar MPPT RS 450/100-Tr	HQ2216 up to and including HQ2236

(1) Format of the serial number is HQyywwzzzzz in which yy is the year, ww is the week number, and zzzzz is random.

The serial number (SN) can be found on the label on the enclosure, on the VRM Portal in the Device list, as well as on the label on the carton and in the VictronConnect App.

3. Details

- Warranty of all affected units has been extended (for free) to 10 years. This to accommodate situations in which it is preferred to keep the now installed unit.
- Distributors will provide a new unit before receiving the old one, to allow the swap to be done in a single installer visit.
- Replaced units must be collected by the distributors, and then scrapped including proof of scrap to be collected. Reselling earlier replaced units is illegal and fraud.

Common questions

Q: When a MPPT RS 450/100, of the said batches, works well, should the unit be replaced?

A: If the end customer prefers it to be replaced, then that is always accepted. More nuanced: for mission critical systems, especially when installed remotely, we recommend replacing these affected units sooner than later. For systems less mission critical, such as for example ESS systems in a country with a reliable grid, it can be fine to keep it installed.

Q: Is labour and transport covered?

A: No. As per our common warranty terms, our factory warranty covers replacement & repairs only.

Q: What is the failure rate?

A: Out of the first batches, HQ2216, HQ2217, close to 10% of the units has failed. This percentage is still slowly increasing over time. For later batches, for example HQ2236, the failure rate is much lower for now, but they have not been installed as long as the earlier batches – and are thus expected to fail at a similar rate.

Q: Is Victron still shipping/selling affected batches?

A: No. All remaining stock of these batches has been removed and is being withdrawn from distributors.